+ Code  + Markdown  |  ▷ Run All  ↺ Restart  ☰ Clear All Outputs  |  ⊡ Jupyter Variables  ☰ Outline

```python
import math
def trig_calculator():
    print("Basic Trigonometry Calculator")
    print("Choose an option:")
    print("1. Sine")
    print("2. Cosine")
    print("3. Tangent")
    print("4. Cotangent")
    print("5. Secant")
    print("6. Cosecant")
    choice = int(input("Enter choice (1-6): "))
    if choice in [1, 2, 3, 4, 5, 6]:
            angle_deg = float(input("Enter angle in degrees: "))
            angle_rad = math.radians(angle_deg)  # Convert to radians

    if choice == 1:
            result = math.sin(angle_rad)
            print(f"Sine({angle_deg}°) = {result}")
    elif choice == 2:
            result = math.cos(angle_rad)
            print(f"Cosine({angle_deg}°) = {result}")
    elif choice == 3:
            result = math.tan(angle_rad)
            print(f"Tangent({angle_deg}°) = {result}")
    elif choice == 4:
            result = 1 / math.tan(angle_rad)
            print(f"Cotangent({angle_deg}°) = {result}")
```

[13]

```python
        angle_deg = float(input("Enter angle in degrees: "))
        angle_rad = math.radians(angle_deg)  # Convert to radians

    if choice == 1:
            result = math.sin(angle_rad)
            print(f"Sine({angle_deg}°) = {result}")
    elif choice == 2:
            result = math.cos(angle_rad)
            print(f"Cosine({angle_deg}°) = {result}")
    elif choice == 3:
            result = math.tan(angle_rad)
            print(f"Tangent({angle_deg}°) = {result}")
    elif choice == 4:
            result = 1 / math.tan(angle_rad)
            print(f"Cotangent({angle_deg}°) = {result}")
    elif choice == 5:
            result = 1 / math.cos(angle_rad)
            print(f"Secant({angle_deg}°) = {result}")
    elif choice == 6:
            result = 1 / math.sin(angle_rad)
            print(f"Cosecant({angle_deg}°) = {result}")
    else:
            print("Invalid choice! Please select a number between 1 and 6.")
```

[13]   ✓   5.2s

```
Cosine(45.0°) = 0.7071067811865476
```